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*Ans*

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/703,942	10/31/2000	Eric A. Pulsipher	10008102-1	4047

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EXAMINER

SCHULTZ, WILLIAM C

ART UNIT PAPER NUMBER

2664

DATE MAILED: 07/06/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/703,942

Applicant(s)

PULSIPHER ET AL.

Examiner

William C. Schultz

Art Unit

2664

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 October 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 8/13/2002.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Information Disclosure Statement***

The information disclosure statement (IDS) submitted on 8/13/2002 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement has been considered by the examiner.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-7,9,15-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

"converting", one skilled in the art knows that conversion is changing something from one thing into another thing. The specification fails to disclose what the topology was before conversion into a tuple. The topology had to be stored as some kind of data representation before conversion into a tuple. Since, there is no disclosure of what a topology was before conversion, the specification fails to enable.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 8,10,12-14 are rejected under 35 U.S.C. 102(b) as being anticipated by George et al. [U.S. Pat. 4,644,532].

A note on claim interpretation: the term tuple is defined twice in spec. First on page 5 , line 25 then on page 6, line 7. Page 6 contains a broader definition of a tuple as “any collection of assorted data”, this could be thought of as a database record. No limit on size is presented in the spec., big or small, with respect to what the tuple holds, some examples have been presented of what a tuple could contain but still nothing limits a tuple from being just one item of data about a link or path or arc, as would be understood by one skilled in the art of network topology mapping to be equivalents of each other.

“converting”: The examiner will take the meaning of “converting” to mean building, see above 112 1<sup>st</sup>. Claim 8 recites apparatus type limitations and since the applicant can label any box anything no specific meaning is construed into the limitation’s function by merely it’s labelling.

Regarding claim 8, George et al. discloses all the following subject matter: A system for mapping a network topology by identifying changes between an existing topology and a new topology, based on changes to data tuples that represent nodal connections comprising:

a topology database that stores an existing topology of a network; and **(fig. 2, part 105; col. 5, lines 49-51)**

a topology converter (**fig. 2, part 103**) connected to the topology database (**fig. 2 part 105**) that receives new tuples that represent new nodal connections;(**col. 5, lines 60-63; col. 6, lines 55-68**) and compares the new tuples with the existing topology to identify changes in the network.(**col. 12, lines 54-66**)

regarding claim 10, George et al. further discloses the topology converter updates the topology database with a new topology based on the new tuples. (**col. 12, lines 56-58 – the time stamp and sequence number is data in a tuple**)

regarding claim 12, George et al. further discloses the topology converter identifies duplicate tuples that appear both in the list of existing tuples and in the new tuples, and maintains a current status of the topology for these tuples. (**col. 12, lines 58-62**)

regarding claims 13,14, George et al. further discloses the topology converter searches for a host of a new singly-heard host link tuple or a new multi-heard host link tuple in the list of existing tuples. (**fig. 1 – disclosed in the figure are what appears to be singly-heard hosts, since the limitation is in the alternative this citation meets the claimed limitation; col. 12, lines 54-62 – searching is inherent because the sequence number is compared, the sequence number could not have been compared if it was not searched for in the database**)

further regarding claim 14, the conflict tuple being searched for is the tuple that has a change associated with it. As already disclosed in the rejection for claim 13, the topology monitor searches for the "tuple" that matches the message it got a message for.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over George et al. [U.S. Pat. 4,644,532] as applied to claim 8 above, and further in view of Stevenson et al. [U.S. Pat. 5,023,873].

Regarding claim 11, George et al. discloses link failures as events for causing topology changes that needs updating in the topology database. The link goes down for some reason. George et al. fails to disclose that the link failure could be resolved by swapping the ports and the host appears on the network again but with a different port.

Stevenson et al. discloses that swapping ports in communication systems to correct for a link failure was well known at the time of invention. **(col. 12, lines 8-12, lines 26-34)**

It would have been obvious for one skilled in the art at the time of invention to include in George et al. the ability to identify that a port has been swapped and that causes a topology change update to occur.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

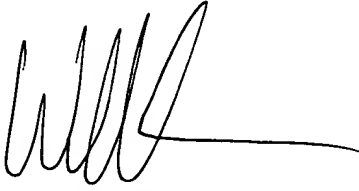
Diebboll et al. [U.S. Pat. 5,886,643] - The reference has all the featured limitations of the rejected independent claims and could have been used in a second 102 rejection but George et al. is older.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William C. Schultz whose telephone number is 703-305-2367. The examiner can normally be reached on M-F(7-4)(first bi-week) M-Th(7-4)(second bi-week).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 703-305-4366. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

William Schultz



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